Chesapeake Review



FAC HIGHLIGHTS

During the Federal Agencies Committee (FAC) meeting May 22 in Annapolis, Md., participants heard presentations on the Environmental Protection Agency's (EPA) Water Quality Initiative and on tributary strategy team activities in Maryland, Pennsylvania and Virginia. Participants also reviewed the *Chesapeake 2000 Agreement* (C2K) inventory and the role of federal agencies in attaining C2K goals. Finally, representatives of each member agency provided a brief update of its program-related activities over the last quarter.

Announcements

Rebecca Hanmer, Chesapeake Bay Program (CBP) executive director, provided an update on the Principals' Staff Committee (PSC). The committee has completed water-quality criteria for dissolved oxygen and water clarity, which the CBP signatory states are expected to adopt and incorporate into their permitting requirements. The PSC is still developing a criterion for chlorophyll *a*.

The PSC developed an aggressive new goal of reducing nitrogen entering the Chesapeake Bay to 175 million pounds per year and reducing phosphorous to 12.8 million pounds per year. The PSC developed a goal of reducing sediment entering the Bay from upland sources to 4.15 million tons per year, but the committee is unable to address the issue of near-shore erosion because of the inadequacy of current CBP models in this area. Instead, this issue will be addressed by individual state tributary teams.

Finally, the PSC adopted an overall goal of increasing submerged aquatic vegetation (SAV) in the Bay to 185,000 acres by the C2K target date of 2010. The PSC wants the signatory states to adopt location-specific SAV goals for their waters.

(Continued on page 4)



Participants at the June U.S. Army Chesapeake Bay Program in-progress review meeting enjoy the view from the Philip Merrill Environmental Center in Annapolis, Md.

U.S. ARMY

Army Chesapeake Bay Program In-Progress Review Meeting Looks at Watershed Planning

When installation commanders see the life-cycle benefits of practicing conservation, they discover that doing the right thing is also good economics, said U.S. Army Environmental Center (USAEC) Executive Officer, Lt. Col. Tony Price at the kick-off of the June 10 U.S. Army Chesapeake Bay Program biennial in-progress review meeting (IPR).

The IPR meeting, held at the Philip Merrill Environmental Center in Annapolis, Md., was attended by installation CBP coordinators and representatives of the Army Reserve, the Defense Logistics Agency and the Army Corps of Engineers. Watershed management experts from the USAEC, the U.S. Army Installation Management Agency (IMA) and the U.S. Army Corps of Engineers' Waterways Experiment Station (WES) presented case studies and protocols that described efforts to implement state-of-the-art management techniques.

Explaining that systems operations best management practices are superior to those for land use when meeting sediment and nutrient load targets, Dr. Terry Sobeski, chief of the Environmental Processes Branch of WES, presented several case studies. In a study of the Susquehanna watershed, which straddles Maryland and Pennsylvania

in the upper portion of the Chesapeake Bay watershed, Sobeski correlated soil stability factors such as slope, cover and runoff rates to establish a "critical C factor" between stable and unstable soil. He then correlated land management practices to the occurrence of soil area above and below the C factor. Using this method to characterize the effectiveness of land use practices in the watershed, Sobeski determined that cropland erosion is the leading source of sediment loads to the Bay.

Georgette Myers, a water-quality expert at the IMA, presented a watershed impact assessment protocol that she developed while at USAEC. The protocol calls for establishing baseline water quality data, developing a watershed priority score for impaired waters and an activity impact score for activities causing impairments. The two scores are then added to establish a total activity burden score. By identifying preventive measures to reduce adverse effects of activities known to impair water quality, an installation can develop a solution to reduce the total activity burden score in the most cost-effective manner available.

Shana Bullock of Horne Engineering presented a first look at the Army CBP watershed planning approach

(Continued on page 4)

Maryland 2003 Legislative Update

By Brian Feeney

With much of Maryland's 2003 legislative session dominated by the debate over ways to acquire new revenue to help the state through its record-breaking budget shortfall, environmental legislation was not the state's highest priority. In fact, as happened in 2002, funding for innovative programs passed in previous years, such as Greenprint, Rural Legacy and the Maryland Land Preservation Foundation, was cut. However, seven bills beneficial to the Chesapeake Bay were signed into law.

Land Preservation

Land preservation laws passed in this session represent a fine-tuning of laws already passed rather than the establishment of any new initiatives. One new law amends the 1997 Maryland Smart Growth law by authorizing neighboring counties to designate a priority land-preservation funding area that straddles the counties' borders, provided that each portion of the land would qualify for the priority designation separately.

Another law requires county governments to consider the guidelines adopted by the Maryland Agricultural Land Preservation Foundation when ranking property easements for purchase by the foundation. These guidelines include such factors as the property location, soil productivity and contribution to the local agricultural economy.

Several amendments to the existing state brownfields law facilitates development of those areas. Owners of properties adjacent to brownfields are

Fort Eustis Wins Businesses for the Bay Excellence Award

The U.S. Army Transportation Center and Fort Eustis have received a Chesapeake Bay Program 2002 Businesses for the Bay Excellence Award. Fort Eustis earned the Outstanding Achievement Award for a Government Facility in April 2003 by partnering with the U.S. Navy to establish a centralized management system for hazardous materials, called "Hazmart." This allows the installation to purchase and manage hazardous materials more efficiently, saving money and creating less hazardous waste. Between 1993 and 2001, Hazmart enabled Fort Eustis to reduce its purchase of hazardous materials listed on the Environmental Protection Agency's Toxics Release Inventory by 51 percent, the amount of hazardous waste generated by 32 percent and the amount of pesticides used by 56 percent.

protected from liability for contamination that may migrate onto their land. When a "no further requirements" designation for a cleanup is conditioned on restricted use of the property, those restrictions must be recorded in the deed and transferred to subsequent owners. Finally, if the administrative cost to the Maryland Department of the Environment for processing a voluntary cleanup plan application is less than the \$6,000 application fee, the excess money will be refunded to the applicant.

Water Quality

Maryland environmental advocates have expressed concern that fines levied for violations of state water-quality and wetland laws have not kept up with inflation and are no longer deterrents to violators. Therefore, environmental groups considered the passage of a law increasing those fines to be a major accomplishment of this year's legislative session. New legislation doubled the fines for violating sediment- and erosion-control laws and stormwater management laws from \$5,000 per violation to \$10,000. Violations of wetland protection laws were in-

creased from \$500 for a first offense and \$1,000 for subsequent offenses to \$10,000 and \$25,000, respectively.

Living Resources

A new law authorizes the Maryland secretary of natural resources to make the release of any nonnative aquatic organism a crime. The law also permits Department of Natural Resources enforcement personnel to enter and inspect any property believed to contain these organisms, remove them and recover the enforcement costs from the property owners.

Another new law authorizes the Potomac River Fisheries Commission to regulate all methods of oyster dredging in the river rather than just handscraping. The commission can also now levy dredging fees to cover the cost of replenishing oyster stocks in the river.

A third law broadens funding eligibility under the Department of Natural Resources' Urban and Community Forest Program and Green Shores Program so that an incorporated non-profit organization can receive grants of money, materials or expertise from these programs to participate in forestry projects.



This newsletter is produced by Horne Engineering Services, Inc., under Contract No. DACA31-01-D-0009 for the U.S. Army Environmental Center (USAEC). The articles were written by Brian Feeney and Deborah Gónima. Contributing editors include Gina Kvitkovich, Bill Maly and Helene Merkel. Please contact Rosemary Queen, USAEC, by e-mail, <Rosemary.Queen@aec.apgea.army.mil> or by telephone, 410-436-1586, DSN 584-1586, with any questions, comments or installation success stories.

The newsletter is distributed via U.S. mail and e-mail. It can also be viewed on the Joint Military Services Chesapeake Bay Program Web site. The Web address is http://www.hqda.army.mil/acsimweb/env/cbi/index.html. If you want to be on the distribution list, contact Brian Feeney of Horne Engineering Services, Inc., by e-mail, bfeeney@horne.com, or by telephone, 410-515-5802.

Urban Stormwater Group Working to Meet Stormwater Directive Goals

At the April 2003 meeting of the Urban Stormwater Workgroup of the Chesapeake Bay Program (CBP), members discussed the workgroup's newly developed checklist for innovative stormwater demonstration project criteria. The CBP's December 2001 directive on managing stormwater entering the Bay committed CBP partners to develop 60 innovative stormwater management demonstration projects by 2006 on public lands currently under development or redevelopment and to develop 15 projects on previously developed public lands by 2008.

Demonstration projects must meet all six criteria described on the checklist: promotion of state-of-the-art technology, strategic project location, education and outreach, monitoring, comparison to conventional approaches and reporting of results. Any agency or facility using the checklist can be confident that its demonstration project will meet the requirements of the CBP stormwater directive. To obtain a copy of the stormwater demonstration project criteria checklist, contact workgroup coordinator Martha Corrozi at 410-267-5753.

The workgroup is also evaluating the proposed new riparian forest buffer goal required by the *Chesapeake 2000 Agreement* and revising a document that outlines stream restoration objectives and associated pollutant removal efficiencies in urban areas.

At the workgroup's June 2003 meeting, street sweeping and storm-drain cleaning were discussed in light of research studies from the late 1980s and early 1990s and new data from Baltimore, Md., Department of Public Works and Baltimore County street-sweeping studies. Data from these ongoing projects suggest that reductions

in pollutant loads can be attained by using state-of-the-art equipment. Pollutant levels in stormwater are reduced with tools such as specialized vacuum and sweeping trucks to collect waste, high-powered water jets to dislodge debris from wastewater pipes and culverts and the use of geographic information systems to monitor results.

Al Todd from the U.S. Department of Agriculture's Forest Service led a discussion of urban forestry projects. The Forest Service, in collaboration with the Center for Watershed Protection (CWP), a nonprofit group that provides technical tools for watershed management, is developing a handbook of practical techniques for using trees to sustain and restore watersheds. The manual is designed to be useful to urban foresters, local plan reviewers, stormwater engineers and watershed organizations in the Chesapeake Bay region. The manual will be available in June 2004 in a variety of formats.

(continued on page 4)

U.S. AIR FORCE

Langley Project Wins Coastal America Partnership Award

The Langley Air Force Base Back River restoration team has received a 2002 Partnership Award from Coastal America for its efforts to establish a submerged aquatic vegetation (SAV) bed and sea horse habitat in the waters adjacent to Langley. Presented on April 8, 2003, the award recognizes exceptional teamwork between government agencies, military installations, nonprofit organizations and the private sector to protect and restore coastal resources.

Coastal America is an organization of federal agencies, state and local governments and private groups working to preserve U.S. coasts. Partnership is key to Coastal America's mission because "the partnership accomplishes tasks that no one group could accomplish alone." The team for the ongoing Langley Air Force Base project includes the Langley Air Force Base Natural Resources Program; the Alliance for the Chesapeake Bay; the National Aquar-

ium in Baltimore, Md.; the Virginia Marine Resources Commission; the Virginia Department of Conservation and Recreation; and the Chesapeake Bay Foundation.

"I feel good about Langley getting this award," said Patsy Kerr, the U.S. Air Force Chesapeake Bay Program coordinator. "It shows people that Langley is a part of the Chesapeake Bay watershed. What we do at Langley with the Back River impacts that habitat and the environment."

The project team has restored more than 15,000 square feet of SAV and has built and seeded an oyster reef in the waters adjacent to the installation. Native sea horses will be introduced when vegetation thickness and water quality allow. More information on this project can be found in the December 2002/January 2003 issue of *The Chesapeake Review* at http://www.hqda.army.mil/acsim/env/cbi/images/newsletters/ 1202_0103.pdf>.



driane Mil

The Langley Air Force Base Back River restoration project was honored at a ceremony for the Coastal America 2002 Partnership Awards. From left to right, Virginia Tippie, director, Coastal America; Maureen Koetz, deputy assistant secretary of the Air Force; Ray DuBois, deputy under secretary of defense; and award recipients Patsy Kerr, U.S. Air Force Chesapeake Bay Program coordinator, and Michael Turner, environmental specialist at Langley.

FAC Highlights

(continued from page 1)

Steve Wampler, Aberdeen Proving Ground (APG) Chesapeake Bay Program coordinator; Janmichael Graine, U.S. Army Chesapeake Bay Program coordinator (currently deployed to the Middle East); and Glenn Markwith, Department of Defense (DoD)/U.S. Navy Chesapeake Bay Program coordinator received a certificate of appreciation from the EPA for their help with the 2002 aerial SAV survey of the upper Chesapeake Bay. Allowing the Virginia Institute of Marine Science to fly over otherwise restricted air space was an important APG contribution.

Roundtable Update

Each FAC agency representative gave a brief update on its Bay-related activities over the last quarter. Patsy Kerr, U.S. Air Force Chesapeake Bay Program coordinator, reported that the Air Force is working with the National Tree Trust to plant 700 new trees and has recently received a \$6,000 National Environmental and Education Foundation grant to implement an SAV project for next September's National Public Lands Day. Kerr expressed concern that the U.S. Army Corps of Engineers' project management on several new construction projects at Langley Air Force Base does not include any lowimpact development (LID) measures for managing stormwater.

By contrast, Glenn Markwith, DoD/U.S. Navy Chesapeake Bay Program coordinator, reported that the Naval Facilities Engineering Command will soon be releasing engineering specifications that explicitly include LID principles. In addition, a green roof project is planned for the Norfolk Naval Base. Other Navy projects under way include watershed planning and restoration in the Norfolk area with the nonprofit Elizabeth River Project and near-shore monitoring of SAV.

Other DoD projects include a commanders' conference being organized in cooperation with the University of Maryland's Cooperative Ecosystem Studies Unit for November at the Patuxent Naval Air Station and phragmites eradication at Air Force bases in the Chesapeake Bay watershed and at Fort Eustis. Finally, the DoD will be issuing a directive interpreting

the Chesapeake Bay Restoration Act and will integrate C2K commitments into Superfund remedial actions.

Martin Elliott, program manager at the Office of the Directorate of Environmental Programs, said the U.S. Army, on behalf of the DoD, is developing watershed impact assessment protocols for installations across the country. In addition to creating nutrient management plans for its Chesapeake Bay installations, the Army is developing an SAV propagation handbook and training workshop. The U.S. Army Environmental Center is assisting Fort Indiantown Gap in establishing a nature trail that follows a newly created wetland at the installation.

Meeting minutes can be viewed on the CBP Web site at http://www.chesapeakebay.net/pubs/subcommittee/fac/min-5-22-2003.pdf.

IPR Meeting

(continued from page 1)

handbook, which will be completed in fiscal year 2004. The handbook will be a practical resource for installation natural resource and planning personnel, with step-by-step guidance on watershed planning. Topics will include how to designate and map installation watersheds, watershed assessment techniques and watershed planning processes and techniques at the regional, installation and site levels. The handbook, which will be linked to the USAEC watershed impact assessment protocols handbook, will also provide information on partnering with agencies and nonprofit groups and list sources of funding.

Other presentation topics included the USAEC's Chesapeake Bay Program accomplishments since the last IPR meeting in 2001, the proposed fiscal year 2004 workplan for the Army CBP, the progress of the Urban Stormwater Workgroup of the Environmental Protection Agency's Chesapeake Bay Program toward meeting stormwater directive goals and highlights of the most recent Department of Defense Quality Management Board meeting. Georgette Myers of the IMA and Adriane Miller, project manager for the USAEC's Northern Regional Environmental Office, described the mission, structure and activities of their respec-

Stormwater

(continued from page 3)

CWP also announced that it is hosting a workshop on watershed restoration. Titled the Watershed Restoration Institute, the workshop will be held during the week of Sept. 21 at the Pearlstone Conference and Retreat Center in Reisterstown, Md. For more information, contact Karen Cappiella through the center's Web site, http://www.cwp.org/staff.htm.

The CBP is in the final stages of developing a West Nile virus fact sheet that will outline management practices to minimize mosquito breeding in stormwater management facilities. The information will be available on the Urban Stormwater Workgroup page at http://www.chesapeakebay.net/uwg.htm.

The workgroup will next meet at the CBP offices in Annapolis, Md., on Aug. 18 from 10 a.m. to 3 p.m.

tive organizations. Program coordinators for each installation reported on their progress in meeting CBP goals.

In concluding remarks, Martin Elliott, program manager at the Office of the Directorate of Environmental Programs, addressed the role of IMA Headquarters and its Northeast Regional Office in the Army CBP, saying that personnel from those offices should be included in Army CBP meetings on a regular basis and adding that these offices are a potential source of funding for the CBP projects. Elliott also said that the Army CBP needs to integrate its efforts with the Army's implementation of environmental management systems (also known as EMS). In the coming year, according to Elliott, the Army CBP needs to establish a strong mission and set of goals to position itself for end-of-year money.

A complete report on the IPR meeting, with the speakers' slide presentations, is available on the Army CBP Web site at http://www.hqda.army.mil/acsim/env/cbi.html>.

DoD Commander's Conference

November 18–19
Patuxent Naval Air Station
Need info? Contact Glen Markwith
757-444-5152
gmarkwith@cmar.navy.mil